Remarks

After careful consideration of the outstanding Office Action, this application has been amended accordingly, and favorable consideration of the claims, as amended and added, is herewith respectfully requested.

At page 2 of the Office Action, the Examiner rejected claim 11 "under 35 U.S.C. 112, second paragraph" because "the ram" in line 3 of claim 11 lacked proper antecedent basis. The latter phrase has been changed to "a ram" in line 3, thereby correcting the latter and providing proper antecedent basis for "the ram" in line 5 of claim 11. Accordingly, the withdrawal of the Section 112 rejection is believed to be in order and is herewith respectfully requested.

At the bottom of page 2 of the Office Action the Examiner stated, "Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Cheers et al. (5,692,409)." The Examiner fairly describes the patent to Cheers et al. and at the top of page 3 states: "The die face facing a can wall where the **coolant is sprayed through the coolant dies (5, 10)** adjacent inserts (6) as shown in figure 1 forms a cooling face." At column 4, beginning at line 19, the patentee Cheers et al. states: "high pressure coolant at typically 2000 psi is supplied **to the cup exterior** in order to lubricate the passage of the cup through the dies." The central channel 11 is shown in Figures 1 and 2, and though unnumbered in the latter figure, the central channel 11 opens into an annular channel which feeds coolant through unnumbered substantially tangential ports to effect the lubrication described at column 4, lines 17 through 21. In the very next paragraph, the channel 12, also shown in Figure 1 and Figure 4, emits coolant at a lower pressure through substantially tangential ports which would also spray coolant against the cup exterior in order to lubricate the passage of the cup through the dies. Therefore, as the Examiner

has correctly stated, "the coolant is **sprayed through the coolant dies** (5, 10)."

At paragraph [0011] of the present application, Applicant's cooling cavity is described as including a portion which forms "a cooling face" in association with an adjacent die insert. At paragraph [0027], the second sentence thereof, the insert is described as being "contacted by coolant spacers." Most importantly, at paragraph [0024], penultimate sentence, there is stated: "Furthermore, the toolpack of the invention is cooled **without allowing coolant into the bore** of the machine through which the punch passes during ironing." The latter is described to be of particular importance "if the material of which the can is made or of which it is coated might be attacked by such coolant." Accordingly, in accordance with Applicant's invention, the coolant **does not enter the bore** of the machine and **does not contact the can** being ironed and cooling is achieved through conduction because, of course, the coolant, channel or cavity 8 of at least one of the coolant dies 3 through 6 does not open into the central bore 7. The latter is expressed in amended claim 1 in the last limitation which recites that the circulating coolant within the coolant die adjacent the ironing insert (12) effects cooling "without allowing coolant into a bore of the at least one coolant die (3, 4, 5, 6)." Thus, the difference between the prior art and claim 1 now clearly distinguishes claim 1 over the applied patent to Cheers et al. Equally important, the patent to Cheers et al. lacks a suggestion or motivation for preventing coolant of the central channels 11, 12 from exiting into the bore through the generally tangential outlet openings or ports because to do so would render the entire scope and content of the Cheers et al. patent inoperative for a number of different purposes, including, of course, lubricating the can body as it is carried on the punch

through the dies and the utilization of the high pressure fluid (2000 psi) which "forces the metal of the can onto the punch, clamping the workpiece firmly onto the punch as it enters the ironing ring. The use of such high pressures may also act to centre the punch," etc. (See column 3, lined 39-52.)

Based upon the foregoing, the rejection of claim 1 as being allegedly anticipated by Cheers et al. under 35 U.S.C. § 102(b) is urged to be untenable and the allowance of amended claim 1 and the claims depending directly or indirectly therefrom is respectfully requested.

The rejections of claims 3 through 12 under 35 U.S.C. § 103(a) involve secondary patents (Scholey 6,776,021; Main 4,223,544 and Blue 6,598,450) which have no bearing upon claim 1 as amended herein. Therefore, the secondarily applied prior art does not address the novel and unobvious subject matter of amended claim 1 and thus the formal allowance of dependent claims 3 through 12 is again respectfully requested.

Dependent claims 13,15, 17 and 19 are identical and recite – "said internal cooling cavity (8) includes a radially innermost annular channel defined at least in part by an innermost imperforate annular wall defining said bore." Obviously, the innermost annular wall of the cavities (11, 12) of Cheers et al. are not imperforate, as is clearly evident from Figures 1, 2 and 4, as well as the description relative thereto. Accordingly, the formal allowance of new dependent claims 13, 15, 17 and 19 and respective dependent claims 14, 16, 18 and 20 depending therefrom is herewith respectfully requested.

In view of the foregoing, the formal allowance of each of claims 1 through 20, followed by the passage of the application to issue at an early date would be most appreciated.

Very respectfully,

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